

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A substrate processing apparatus comprising:

a processing chamber for accommodating a substrate therein;

a mounting table for mounting the substrate thereon;

a heating member disposed in the mounting table, for heating the substrate;

a sealing member disposed between the mounting table and the processing chamber;

and

a cooling unit, having a cooling medium, for cooling the sealing member by using a latent heat of vaporization of the cooling medium included therein.

Claim 2 (Original): The apparatus of claim 1, wherein the cooling unit includes a depressurized airtight casing for accommodating the cooling medium therein.

Claim 3 (Original): The apparatus of claim 1, further comprising a temperature sensor disposed near the sealing member and a cooling unit controller for controlling the cooling unit based on a measurement result of the temperature sensor.

Claim 4 (Original): The apparatus of claim 1, further comprising a processing gas supply system for supplying a processing gas into the processing chamber.

Claim 5 (Original): The apparatus of claim 4, wherein the processing gas supply system includes a plurality of processing gas supply units for supplying different processing gases and a processing gas supply unit controller for controlling each of the processing gas supply units such that the processing gases are supplied alternately.

Claim 6 (Previously Presented): A substrate processing apparatus comprising:
a processing chamber for accommodating a substrate therein;
a mounting table having a mounting portion for mounting thereon the substrate and a support for supporting the mounting portion;
a heating member disposed in the mounting portion, for heating the substrate;
a sealing member disposed between the support and the processing chamber; and
a shielding member for shielding a heat radiation directed toward the sealing member from the mounting portion; and
a shielding cap covering a bottom portion of the support.

Claim 7 (Original): The apparatus of claim 6, wherein the shielding member covers at least a part of a bottom surface of the mounting portion.

Claim 8 (Original): The apparatus of claim 6, further comprising a substrate elevating member for elevating the substrate, wherein the shielding member supports the substrate elevating member.

Claim 9 (Original): The apparatus of claim 6, further comprising a processing gas supply system for supplying a processing gas into the processing chamber.

Claim 10 (Original): The apparatus of claim 9, wherein the processing gas supply system includes a plurality of processing gas supply units for supplying different processing gases and a processing gas supply unit controller for controlling each of the processing gas supply units such that the processing gases are supplied alternately.

Claim 11 (New): A substrate processing apparatus comprising:

- a processing chamber for accommodating a substrate therein;
- a mounting table for mounting the substrate thereon;
- a heating member, disposed in the mounting table, for heating the substrate;
- a sealing member disposed between the mounting table and the processing chamber;

and

means for suppressing temperature rise of the sealing member.